Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A surface emitting semiconductor laser including a resonator formed on a substrate and emitting a laser beam toward a direction vertical to the substrate from an emitting surface formed on an upper surface of the resonator, the resonator including:

a first mirror formed above the substrate;

an active layer; and

a second mirror located oppositely to the first mirror and sandwiching the active layer therebetween;

a reflectivity adjustment layer that is formed on the emitting surface;

the second mirror including a layer of which an optical thickness is $m_1 \lambda /2$ (m_1, a natural ~~number),~~ number > 0), when a wavelength of the laser beam is λ; and

an optical thickness of the reflectivity adjustment layer being $(2m_2-1) \lambda /4$ (m_2, a natural ~~number).~~ number > 0),

the layer of which the optical thickness is $m_1 \lambda /2$ is formed in whole area of the second mirror, the reflectivity adjustment layer is formed within a part of an aperture formed on the upper surface of the resonator.

2. (Previously Presented) The surface emitting semiconductor laser claimed in claim 1, reflectivity of the laser beam in a first region being larger than reflectivity of the laser beam in a second region, when the first region is defined as a region comprising the reflectivity adjustment layer and a lower region of the reflectivity adjustment layer in the second mirror, and the second region is defined as a region except the first region in the second mirror.

3. (Currently Amended) A surface emitting semiconductor laser including a resonator formed on a substrate and emitting a laser beam toward a direction vertical to the substrate from an emitting surface formed on an upper surface of the resonator, comprising:

a first electrode and second electrode that inject electric current into the resonator, at least a part of the first electrode being formed on the upper surface of the resonator; ~~and~~

an aperture that is formed on the upper surface of the resonator, the emitting surface being formed on the upper surface of the resonator within the aperture, and a reflectivity adjustment layer being formed on the emitting surface; and

a thickness of the reflectivity adjustment layer ~~being uneven.~~varies,

the layer of which the optical thickness is $m_1 \lambda /2$ is formed in whole area of the second mirror, the reflectivity adjustment layer is formed within a part of the aperture.

4. (Previously Presented) The surface emitting semiconductor laser claimed in claim 3, the resonator including a first mirror formed above the substrate, an active layer and a second mirror located oppositely to the first mirror and sandwiching the active layer therebetween; and

reflectivity of the laser beam in a first region being larger than reflectivity of the laser beam in a second region, when the first region is defined as a region comprising the reflectivity adjustment layer and a lower region of the reflectivity adjustment layer in the second mirror, and the second region is defined as a region except the first region in the second mirror.

5. (Currently Amended) The surface emitting semiconductor laser claimed in claim 4, the second mirror including a layer of which the optical thickness is $m_1 \lambda /2$ (m_1, a natural ~~number),~~ number > 0), and the optical thickness of the reflectivity adjustment layer is $(2m_2-1) \lambda /4$ (m_2, a natural ~~number),~~ number > 0), when a wavelength of the laser beam is λ.

6. (Original) The surface emitting semiconductor laser claimed in claim 1, the layer of which the optical thickness is $m_1 \lambda /2$ constituting a top layer of the second mirror.

7. (Original) The surface emitting semiconductor laser claimed in claim 1, the reflectivity adjustment layer being transparent to the laser beam.

8. (Original) The surface emitting semiconductor laser claimed in claim 1, the plane configuration of the reflectivity adjustment layer being a circle.

9. (Original) The surface emitting semiconductor laser claimed in claim 8, the diameter of the reflectivity adjustment layer being equal to or less than 6 μ m.

10. (Original) The surface emitting semiconductor laser claimed in claim 8, the emitting surface being a circle and the reflectivity adjustment layer being arranged coaxially with a center axis of the emitting surface.

11. (Original) The surface emitting semiconductor laser claimed in claim 1, the reflectivity adjustment layer being composed of at least one of a resin hardened by heat and a resin hardened by an ultraviolet ray.

12. (Canceled)

13. (Currently Amended) The surface emitting semiconductor laser claimed in ~~claim 12,~~ claim 1, the thickness of the reflectivity adjustment layer in an area close to ~~the~~ a contact surface with ~~a first layer~~ an electrode being larger than that of ~~the~~ an other area.

14. (Previously Presented) The surface emitting semiconductor laser claimed in claim 1, the second mirror being provided with a current blocking layer having a concentric circle-shaped plane, and an area of an inside circle of the current aperture that is larger than a sectional area of the reflectivity adjustment layer.

15. (Original) The surface emitting semiconductor laser claimed in claim 1, at least one part of the resonator including a column-like portion.

16. (Original) A light module comprising an optical wave-guide and the surface emitting semiconductor laser claimed in claim 1.

17. (Original) A light transmission device comprising the light module according to claim 16.

18. (Withdrawn) A method of manufacturing a surface emitting semiconductor laser including a resonator formed on a substrate and emitting a laser beam toward a direction vertical to the substrate from an emitting surface formed on an upper surface of the resonator, comprising:

forming a resonator on the substrate,

forming a first mirror formed above the substrate, an active layer, and a second mirror located oppositely to the first mirror and sandwiching the active layer therebetween, and

forming a layer of which an optical thickness is $m_1 \lambda /2$ (m_1, a natural number) in the second mirror; and

forming a reflectivity adjustment layer of which an optical thickness is $(2m_2-1) \lambda /4$ (m_2, a natural number).

19. (Withdrawn) The method of manufacturing a surface emitting semiconductor laser claimed in claim 18, forming the reflectivity adjustment layer further comprising forming a precursor of the reflectivity adjustment layer by ejecting a droplet onto the emitting surface, and hardening the precursor thereafter to form the reflectivity adjustment layer on the emitting surface so as to form the reflectivity adjustment layer on the emitting surface.

20. (Withdrawn-Currently Amended) A method of manufacturing a surface emitting semiconductor laser including a resonator formed on a substrate and emitting a laser beam toward a direction vertical to the substrate from the emitting surface formed on the upper surface of the resonator, comprising:

forming a resonator on the substrate;

forming a first electrode and a second electrode to inject a current into the resonator, at least a part of the first electrode being formed on the upper surface of the resonator and an aperture is formed on the upper surface of the ~~resonator,and~~ resonator, and

forming the reflectivity adjustment layer on the emitting surface .

21. (Withdrawn) The method of manufacturing a surface emitting semiconductor laser claimed in claim 20, forming the reflectivity adjustment layer further comprising forming a precursor of the reflectivity adjustment layer with ejecting a droplet onto the emitting surface, and hardening the precursor thereafter to form the reflectivity adjustment layer on the emitting surface.

22. (Canceled)